

**CLAIMS**

1. A method for conveying information over a wireless interface in the form of a digitally encoded message, comprising the steps of:

- providing a set of bits as a first piece of information to be transmitted,
- applying a certain baseband signal processing method to process the bits to be transmitted,
- providing a second piece of information to be transmitted and
- selecting the baseband signal processing method from a set of allowed baseband signal processing methods in accordance with the provided second piece of information.

2. A transmitting device for transmitting information over a wireless interface in the form of a digitally encoded message, comprising:

- means for providing a set of bits as a first piece of information to be transmitted
- means for applying a certain baseband signal processing method to process the bits to be transmitted,
- means for providing a second piece of information to be transmitted and
- means for selecting the baseband signal processing method from a set of allowed baseband signal processing methods in accordance with the provided second piece of information.

3. A receiving device for receiving information over a wireless interface in the form of a digitally encoded message, comprising:

- means for receiving a set of bits as the representative of a first piece of received information
- means for applying a certain baseband signal processing method to process the set of bits,
- means for selecting the baseband signal processing method from a set of allowed baseband signal processing methods so that applying it produces a first piece of received information which satisfies a certain criterion of acceptance and
- means for providing a second piece of received information in the form of the identified baseband signal processing method.

4. A transmission system comprising:

- a transmitting device and a receiving device,
- in the transmitting device means for providing a set of bits as a first piece of information to be transmitted and means for applying a certain baseband signal processing method to process the bits to be transmitted,

- further in the transmitting device means for providing a second piece of information to be transmitted and means for selecting the baseband signal processing method from a set of allowed baseband signal processing methods in accordance with the provided second piece of information,
- 5 - in the receiving device means for receiving a set of bits as the representative of a first piece of received information and means for applying a certain baseband signal processing method to process the set of bits, and
  - further in the receiving device means for selecting the baseband signal processing method from a set of allowed baseband signal processing methods so that applying it produces a first piece of received information which satisfies a certain criterion of acceptance and means for providing a second piece of received information in the form of the identified baseband signal processing method.
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